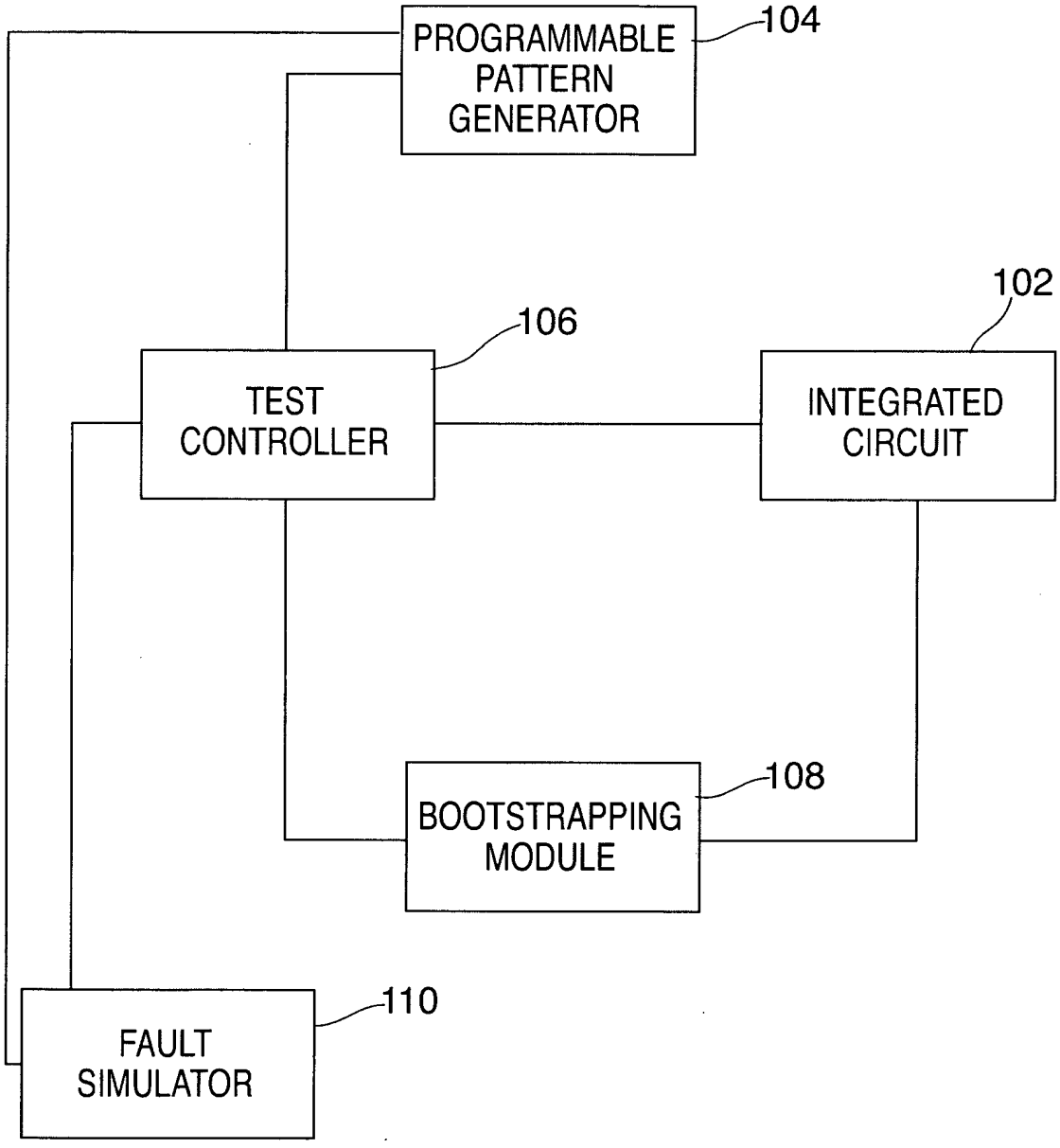
PROGRAMMABLE PATTERN GENERATOR
104
102
106
TEST CONTROLLER
INTEGRATED CIRCUIT
108
BOOTSTRAPPING MODULE
110
FAULT SIMULATOR

FIG. 1

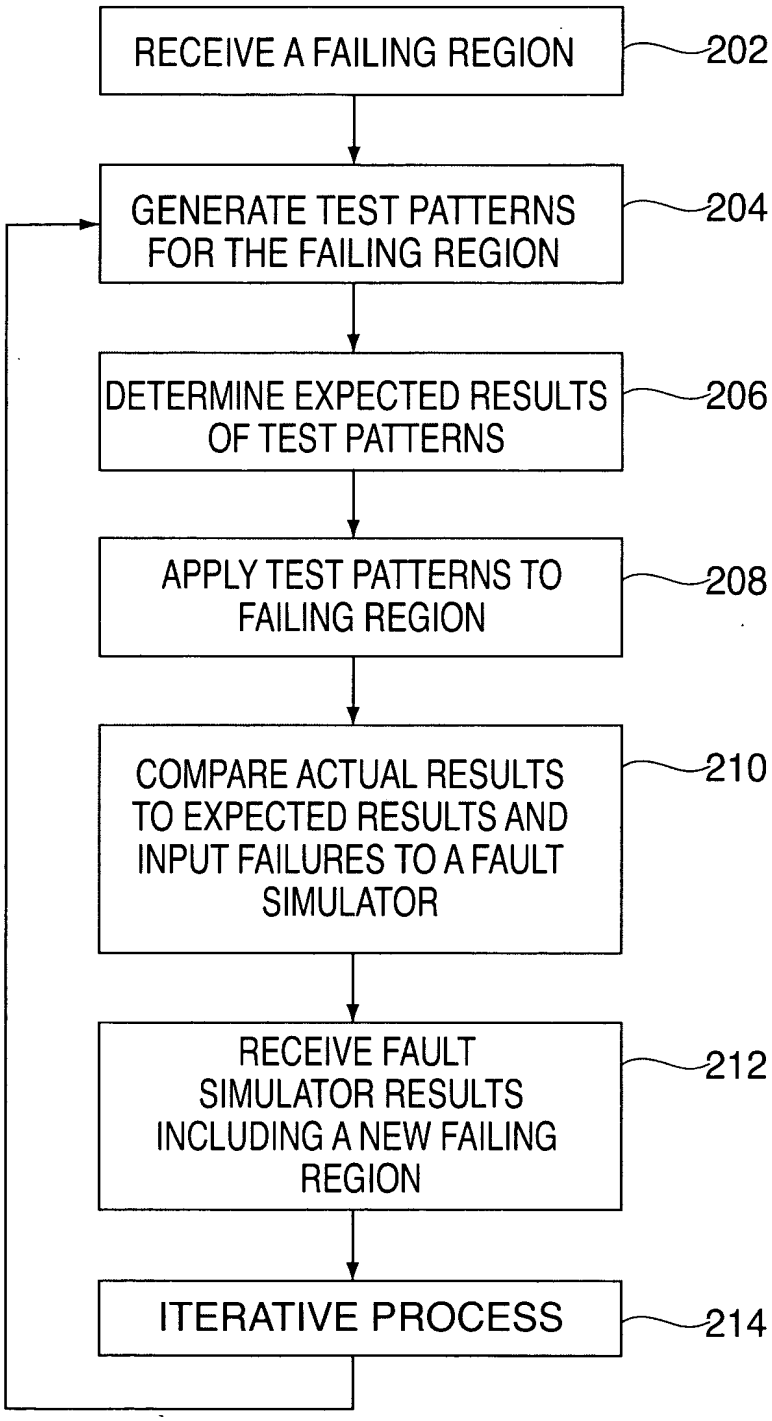
RECEIVE A FAILING REGION
202
GENERATE TEST PATTERNS FOR THE FAILING REGION
204
DETERMINE EXPECTED RESULTS OF TEST PATTERNS
206
APPLY TEST PATTERNS TO FAILING REGION
208
COMPARE ACTUAL RESULTS TO EXPECTED RESULTS AND INPUT FAILURES TO A FAULT SIMULATOR
210
RECEIVE FAULT SIMULATOR RESULTS INCLUDING A NEW FAILING REGION
212
ITERATIVE PROCESS
214

FIG. 2

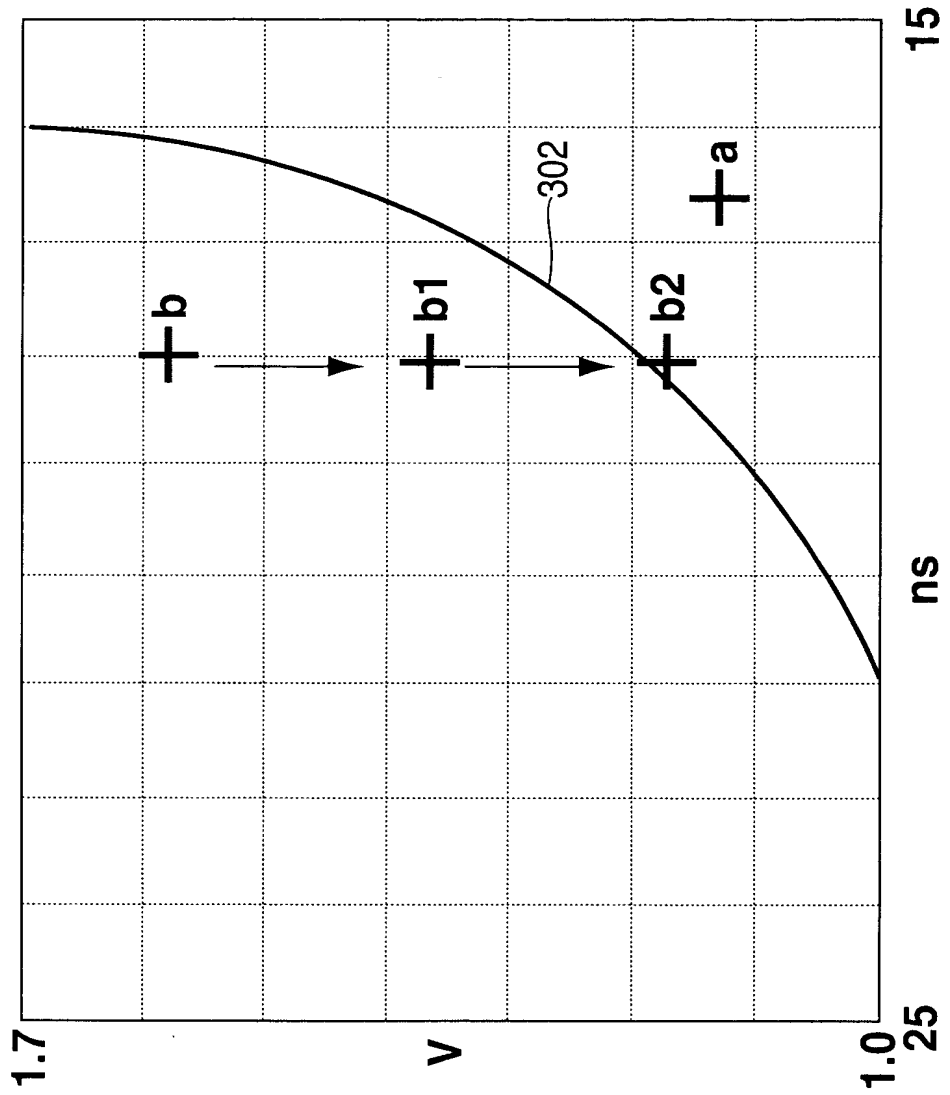

FIG. 3

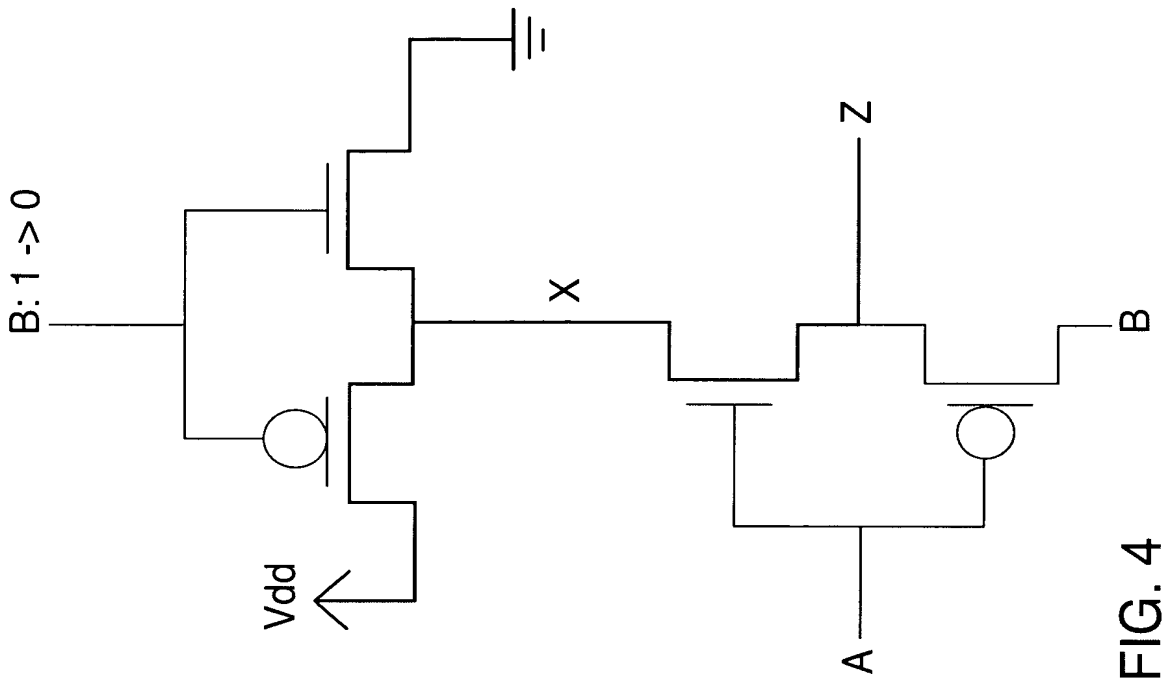

FIG. 4

A	B	Z expect	Z actual
0 -> 0	0 -> 0	0	0
0 -> 0	0 -> 1	1	1
0 -> 0	1 -> 0	0	0
0 -> 0	1 -> 1	1	1
0 -> 1	0 -> 0	1	1
0 -> 1	0 -> 1	0	0
0 -> 1	1 -> 0	1	0
0 -> 1	1 -> 1	0	0
1 -> 0	0 -> 0	0	0
1 -> 0	0 -> 1	1	1
1 -> 0	1 -> 0	0	0
1 -> 0	1 -> 1	1	1
1 -> 1	0 -> 0	1	1
1 -> 1	0 -> 1	0	0
1 -> 1	1 -> 0	1	0
1 -> 1	1 -> 1	0	0